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by D. Massengill Shaw

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Man's Best Friend as a Reading Facilitator

By

D. Massengill Shaw

Abstract:

The purpose of this manuscript was to describe information about an animal-assisted therapy, specifically the Reading Education Assistance Dog (R.E.A.D.) program. In this manuscript I provide information about R.E.A.D. programs in general. Next, I share perspectives solicited from R.E.A.D. participants, specifically teachers, parents, students and volunteer handlers. Then I discuss how these practices may become a part of your classroom with possible adaptations. Finally, I summarize why R.E.A.D. makes a difference.

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Man's Best Friend as a Reading Facilitator

Doogan, a soft coated wheaten terrier, sits on the blanket awaiting the arrival of a special friend. Heidi situates herself so she can put one arm on Doogan and use the other arm to hold her book. Heidi is learning to read so her fluency is choppy, but this is not important to Doogan. When Heidi shows Doogan the pictures he looks at them like he is interested, and he listens while she reads the entire story. Afterward Heidi returns to her classroom with a smile on her face and a confidence in her spirit.



Reading Education Assistance Dogs[®] (R.E.A.D.[®]), a literacy support program founded by Intermountain Therapy Animals, is “a carefully planned reading program that involves collaboration among, at the very least, reading professionals, registered and insured therapy dogs and handlers, schools and/or local library and media specialists, and the families/community” (Jalongo, 2005a, p. 153). The R.E.A.D. program began in Salt Lake City, Utah (1999) with the mission “to improve the literacy skills of children in a unique approach employing a classic concept: reading with a dog” (ITA, 2007, p. 9). Currently, there are approximately 3,000 volunteers teams serving in 49 of the 50 states, 4 provinces in Canada, and 59 teams in Europe and elsewhere around the world with registrations increasing daily. Registered teams include a handler and a dog who have been trained, evaluated and registered as a licensed therapy team. This means the dogs have been tested for health, safety, skills, and temperament. The volunteer handlers have passed a test with their dogs and a separate test documenting their knowledge about supporting students in R.E.A.D. settings.

In this manuscript I provide information about R.E.A.D. programs in general. Next, I share perspectives solicited from R.E.A.D. participants, specifically teachers, parents, students and volunteer handlers. Then I discuss how these practices may become a part of your classroom and possible adaptations. Finally, I summarize why R.E.A.D. makes a difference.

Overview of R.E.A.D.

The powerful influence pets have on people's physical and emotional health has been documented (Lynch, 2000; Nimer & Lundahl, 2007). Substantial research credibility shows the value of using animals in either animal-assisted *activity* or animal-assisted *therapy* (Lynch, 2005; Nimer & Lundahl, 2007). The purpose of animal-assisted activity (AAA) is to provide

motivation, education, or recreational opportunities that enhance the quality of life (Granger & Kogan, 2006). AAA has three features that distinguish it from animal-assisted therapy: 1) the visits are spontaneous, which means the children are not pre-selected and content is not pre-planned, 2) volunteers/providers are not required to keep documentation, and 3) no specific treatment goals are outlined. In contrast, animal-assisted therapy (AAT) includes the animal as part of a treatment plan with the goal of accomplishing set outcomes (Nimer & Lundahl, 2007). Reading Education Assistance Dogs (hereafter R.E.A.D.) offers both models. In a public library setting R.E.A.D. is animal-assisted activity because children read to a dog for one session without documentation or planning; whereas pre-selected children who read to a dog on a regular basis in a school setting with documentation is animal-assisted therapy. This manuscript focuses on the animal-assisted therapy aspect of R.E.A.D. by sharing information that is situated in schools.

R.E.A.D. began in 1999 when Sandi Martin, a registered nurse and Intermountain Therapy Animals (ITA) board member, contemplated the effect animals have on humans and the need to promote emotionally safe environments for children to develop their reading skills. She proposed that ITA partner with libraries and allow registered teams to listen to children read; this was the beginning of Reading Education Assistance Dogs. Within a short period of time, the R.E.A.D. program was taken to bookstores and schools. Since then, therapy dog organizations across the nation have promoted reading to dogs (Hughes, 2002).

Many anecdotes, such as the following, have been collected since R.E.A.D.'s conception. A ten-year old girl, Natasha, could hardly read and her reading level was way below that of her peers. When asked to read to Meg [dog], Natasha gave every reason she shouldn't read to Meg.

The dog's handler convinced Natasha to read to Meg and she chose a 32-page picture book. Meg was listening at Natasha's side through the entire 45 minutes it took to finish the simple book. When Natasha finished, she gasped, "Oh my! I'm finished – I've never read a whole book before, ever in my life!"

Anecdotes illustrate the power of animal-assisted therapy and their descriptive evidence leaves people with a good feeling. While that is important, R.E.A.D. is more than a warm and fuzzy program (Friesen, 2009). Small-scale studies of R.E.A.D. have consistently shown that R.E.A.D. improves students' reading skill and motivation (Heyer, 2007; Martin, 2001). Heyer (2007), who was enrolled in a master's program with an emphasis in reading, met with three children in grades 2-4 who performed "just below grade level" but did not receive intervention from the school's reading specialist. Three other students, comparatively, met with a R.E.A.D. team. Both control (instructed by Heyer) and experimental students (R.E.A.D.) received intervention for 20 minutes per week for a total of 16 weeks. Qualitative and quantitative assessments showed that the students who met with the R.E.A.D. team had slightly higher assessment post-scores than the control students. Additionally, the students who read to a dog had higher self-confidence and had gained a love for reading. Martin (2001) enrolled ten students, ages 5 to 9, in a R.E.A.D. program. The ten students individually met a pet partner once a week for 20 minutes during the school year. The students were tested by the school's reading specialist on nationally recognized assessments. All ten students significantly improved their reading scores. Their classroom teachers also noticed improvements in self-confidence, involvement in school activities, and decreased absenteeism.

A typical R.E.A.D. session, lasting approximately 20-30 minutes, follows several procedures. Upon arriving in the room, the handler places a blanket on the floor defining the dog's space; this is set in an area of the room where there are few interruptions and distractions. The position of the dog on the blanket, typically between the handler and child, can help a child feel connected. When the child arrives, there is a moment for friendly chatter. Within minutes the student is sitting on the blanket reading to the dog while the pet and handler practice careful listening. If a child struggles with a word, adequate time is given for problem-solving, but the handler will help the child without doing the reading for the child. The handler utilizes the dog to solicit interaction; one way is to speak for the dog. For example, "That's a new word that Doogan's never heard, can you tell him what it means?" or "Doogan really enjoyed that story. He'd like to hear it again, but this time in your own words." "Doogan wonders how [the character] felt about that," or "Doogan wonders what is going to happen next—what do you think?" which the child can answer. Throughout the session, the handler participates enthusiastically and interactively without dominating. At the conclusion of the session, the child has an opportunity for closure by saying goodbye and giving the dog a treat or hug.

Following is a description of R.E.A.D. through a dog's eyes. Although dogs can't speak, they communicate in so many ways. The description is based on a published document (ITA, 2008) but personalized with my own R.E.A.D. experiences. When I get Doogan's bag (with blanket and books), he knows it is time for school. Immediately Doogan wags his tail and kisses me as I put on my shoes, never leaving my side. As we enter the school, Doogan prances and is very alert, looking around and noticing every detail as we walk down the school hallway. Once in the room, Doogan readily settles down and begins his work. To him, each child is special.

Doogan realizes how important it is to look at pictures and allow the reader to touch him.

Doogan is also cognizant that I am right there with him, often looking him in the eye and giving him positive reinforcement. The blanket is a happy and safe place with no negative corrections to the reader or dog. I am attentive to the reader and him, and I support the reader with the right amount of interaction.



In the photos, you will notice how Doogan and I are interested in the book and helping the reader have a relaxing time. From Doogan's perspective, I have a positive, friendly attitude toward the reader, him, and everyone in the facility.

Perspectives

In this paper, I'd like the voices of teachers, parents, students, and dog handlers to speak for themselves. The data for this portion of the manuscript was collected from Desert Rose

School District (all names are pseudonyms), which is located in the southwest region of the United States. There were 197 students who participated in R.E.A.D. over the course of one school year beginning with 2006-2007 through 2010-2011. A total of 78 teachers of grades K-5 instructed the participating students. Thirteen dogs and their handlers provided the intervention. All participating students, their parents, and teachers were asked to complete questionnaires at the end of the school year. The qualitative data is presented below. A more thorough description of the methodology including demographics, data analysis, and quantitative results is provided in Appendix A.

The teachers

Reading growth. Confidence. Motivation. Envy. These are the key words that describe what teachers said about the R.E.A.D. program. Following are some specific comments the teachers have expressed.

- Students gained a lot more confidence in their reading orally and with their abilities to effectively use their reading strategies.
- My student went up significantly in his reading (Developmental Reading Assessment) score as well as his confidence in reading and retelling a story.
- Where they were previously reluctant to read, now they view it as enjoyable.
- My students seem calmer after reading with [dog]. They show more understanding to others in our room. They're talking with each other and students in other classes in a more friendly tone and with more details.

- Students who participated were the envy of all other students! It was one program that they actually wanted to participate in and didn't consider it as a punishment or stigma as they sometimes do with other intervention programs.

In sum, the teachers readily believed R.E.A.D. is a viable literacy intervention. One teacher wrote on her survey, "I really love this program because it provides a one-to-one intervention for students who need extra support but do not qualify for other intervention programs." This has significance for educators who are looking for ways to support developing or reluctant readers, but may be limited by resources and time.

The parents

Parents were happy to have their child participate in the program. Their responses can be summarized with terms similarly mentioned by the teachers: interest, motivation, confidence, and reading growth.

- Participating in this program has brought a joy of reading for my special needs child.
- My child is now more interested in reading and is not afraid to attempt new reading, all kinds of material.
- My son was behind in his reading but with the help of the program my son has advanced from a level 6 reading to almost a 12 and the dogs are a great inspiration to him.
- It has made him a better reader and he has a better understanding of what he is reading.

They are not just words because he is convinced [dog] comprehends what he is saying.

The students

Students enjoyed going to R.E.A.D. sessions. Confidence and comfort are two ideas the students expressed in their responses.

- I can read with more confidence every time I read to the dog. I feel that I am becoming better at reading. Because I feel if I wasn't reading to the dog my reading would not be increasing. I also want to say thank you for your patience when helping me read.
- The dog comforts me when I read her a story. If a hard word comes to me I sound it out. I love reading with the dog and her amazing owner. They are so nice to me and all of the other kids want to read with her and the dog. If I can read with her and the dog every year I would.

The handlers

Handlers found great pleasure watching children transform as readers before their eyes. This experience and the bonding that occurred made their volunteered time worthwhile. You can visualize the experience as the two handlers share their comments.

- One student told me he had new books and they were really hard for him since he had not practiced. I encouraged him to try...His response was, "Well it's not hard when I read to the dog."
- One student would always turn the book and point out the important things in the pictures to [dog]. One day [dog] was lying on his back and the student turned the book upside down so [dog] could see the pictures right side up.

Classroom Practices

Several resources are available if you want to learn more about R.E.A.D. For example, you may start by reviewing the website www.therapyanimals.org to gain knowledge of the R.E.A.D. program in general. The website outlines steps to become registered, provides how to find a R.E.A.D. team/workshop, and contains results about R.E.A.D. programs. To request a

R.E.A.D. team's visit to your classroom or school, contact your local registered therapy dog association or a national organization such as Delta Society and inquire if they have R.E.A.D. teams available to serve your school.

Implementing a Reading Education Assistance Dog program requires planning and preparation to ensure success. Jalongo (2005a) offers practical advice to educators, librarians and administrators who wish to have a R.E.A.D. program in their community. She provides 12 practical suggestions on how to implement a R.E.A.D. program. First, it is important to understand the importance and time commitment for training the dog and to prepare the handler for helping students read. Second, gaining administrative support and educating your colleagues is critical to launching a program. Third, safety and liability issues need to be addressed. Fourth, the culture of the community should be considered. Fifth, finances should be considered. While most programs are voluntary, purchasing student books are one aspect that grants, donations, or private organizations may support. Sixth, determine which children are to participate. Seventh, secure parents'/guardians' permission before beginning intervention. Eighth, address sanitation concerns. Ninth, inform colleagues, staff and families about the program. Tenth, prepare children and staff with an informative session. Eleventh, plan for the dogs' safety and well-being. Twelfth, decide how expansive the program may become. Jalongo's article (see references) provides a great overview of R.E.A.D. and I encourage you to read the manuscript in its entirety.

The title Reading Education Assistance Dogs clearly mentions the canine breed as the focus of animal-assisted activity/therapy. However, the Intermountain Therapy Animals leaders clearly do not discriminate among other animals. They encourage animal lovers of many breeds, including birds, cats, or rabbits to become involved. In fact, Sudanese students read to a donkey.

Animal-assisted therapy is more than keeping a classroom pet, or having a teacher bring her pet dog to class. The program's success comes as a result of having thoroughly trained, evaluated, and registered teams interact with the child and text. If a teacher wishes to have a qualified R.E.A.D. team visit his/her classroom, but no teams are available, the value and benefits of R.E.A.D. may be adapted. For example, if your classroom already has a pet such as a hamster or guinea pig, the students can be encouraged to read to the classroom pet by arranging a blanket next to the cage, and/or possibly holding the animal. The power of animals should not be diminished. A person's relationship with an animal is one factor that has a moderating effect on stress reduction (Friedmann, Thomas, & Eddy, 2000). An animal partnered with a tutor who is sensitive to children and their efforts to read may positively impact students (Jalongo, 2005b). I'd encourage the teacher to find a school volunteer such as a high school student, parent, or grandparent and train the volunteer how to provide responsive feedback when a child reads to a classroom pet. The teacher can prepare a list of questions or comments for the volunteer to use in order to guide meaningful interactions.

No research has been conducted on a 'stuffed animal' pet, but teachers may like to try that adaptation as well. Children can be imaginative and report to the teacher (or volunteer) on their experience reading to a stuffed animal. After the child practices reading to the stuffed animal, the teacher can solicit school staff who become volunteer listeners. It's a privilege for the child to walk to the cafeteria and read to a food service worker, or find the housekeeper or secretary and ask him/her to listen to the child read.

All faculty and staff can be taught how to give encouragement rather than praise. Praise passes judgment on students' reading, tends to emphasize results rather than the process, and

teaches children to depend on others for evaluation. In contrast, encouragement supports students' efforts and helps them to evaluate their reading without judgment or embarrassment. Volunteers and school staff can learn how to provide sincere and constructive feedback with verbal scaffolding and support that reflects the value and importance of reading (Gambrell, 2011). Examples of encouragement are provided in Appendix B.

If it is not possible to have a R.E.A.D. team visit your school, it may be possible for a registered therapy team to come to the school to teach children about handling a dog and other related humane topics. The students can 'adopt' this dog as a special friend; with the handler's assistance and time, the dog can be a catalyst for discussions about literacy and books. For example, the students could write a letter to the dog telling him about the text they are reading and the handler could write back with the dog's perspective about the book. This pen-pal exchange can be a safe place for students to express themselves without judgment.

Another possible idea is to check with the local public library to see if they offer a pet partner experience for children. Encourage your students and their families to visit the library's program and participate in an animal-assisted activity setting.

Conclusion

R.E.A.D. is able to deliver the necessary criteria to transform reluctant or struggling readers into willing, confident readers by providing a caring, positive and supportive arrangement through a dog and handler. Several conditions for learning (Cambourne, 1995) are present in a R.E.A.D. session. Students are *immersed* in text for 20-30 minutes each week. The students take *responsibility* and have time to use, *employ* and practice their reading in real ways. Time spent engaged in real reading contributes to literacy growth (Gambrell, 2011). Students

make *approximations* without fear of judgment. The handlers provide timely, relevant, nonthreatening *response* through their pet partner while providing high *expectations*. When the emotional climate is sound, students' feelings are acknowledged and positive dispositions are being built while they simultaneously learn concepts and strengthen skills (Katz, 2008). As Melson (2001) said, "Despite most children's acknowledgement that pets cannot literally comprehend what they are saying, children have the feeling of being heard and being understood" (p. 51). In a supportive and engaged environment, "animal-assisted learning" (Friesen, 2009, p. 106) occurs.

Engagement is at the heart of each R.E.A.D. session. "Engagement occurs when learners are convinced that they can engage and try to emulate without fear or physical or psychological hurt if their attempts are not fully correct" (Cambourne, 1995, p. 1987). In Applegate and Applegate's (2010) research, they discovered a number of students were good readers, but disliked reading. The authors stated there is a relationship between engagement and motivation. By providing intellectual challenge and having high expectations for deep thinking, students will become more motivated as readers. Guthrie (2004) said that proficiency is built by participation and engaged reading is "a pathway to achievement" (p. 8). Guthrie, Wigfield, & You (2012) constructed an evidence-based model of engagement and achievement in reading that has four components: 1) classroom practices such as nurturing student interest and assuring opportunity for learning through authentic reading, 2) intrinsic motivation and valuing reading, 3) behavioral engagement that time, effort and persistence in reading is productive, and 4) school achievement showing increased test scores. R.E.A.D. delivers on all four of these components.

Can man's best friend be a reading teacher? No, a dog cannot teach children how to read, but a dog can be an effective reading *facilitator*, whose presence in the reading environment can provide important motivations for children at that crucial early-learning phase when they need not only to develop skills, but also to discover the heartfelt joy of reading. A dog's presence has an amazing effect on changing the tone in the room and the circumstances of the task. The animals are irresistible magnets to the children. The dogs provide comfort and reduce stress (Jalongo, 2005b). In a R.E.A.D. setting they promote authentic and engaged reading that "sets children's hearts afire with enthusiasm and appreciation for the rewards of reading" (Applegate & Applegate, 2010, p. 232). A canine friend partnered with a knowledgeable handler is a catalyst for improving students' reading, but more importantly they are a catalyst for helping children "be a reader."

References

- Applegate, A.J., & Applegate, M.D. (2010). A study of thoughtful literacy and the motivation to read. *The Reading Teacher*, 64(4), 226-234.
- Cambourne, B. (1995). Toward an educationally relevant theory of literacy learning: Twenty years of inquiry. *The Reading Teacher*, 49(3), 182-190.
- Friedmann, E., Thomas, S.A., & Eddy, T.J. (2000). Companion animals and human health: Physical and cardiovascular influences. In A.L. Podberscek, E.S. Paul, & J.A. Serpell (Eds.), *Companion animals and use: Exploring the relationship between people and pets* (pp. 125-142). New York: Cambridge University Press.
- Friesen, L. (2009). How a therapy dog may inspire student literacy engagement in the elementary arts classroom. *LEARNing Landscapes*, 3(1), 105-122.
- Gambrell, L.B. (2011). Seven rules of engagement. *The Reading Teacher*, 65(3), 172-178.
- Granger, B.P., & Kogan, L.R. (2006). Characteristics of animal-assisted therapy/activity in specialized settings. In D.C.S. Richard and D. Lauterbach (Eds.), *Handbook of exposure therapies* (p. 263-286). San Diego, CA: Elsevier.
- Guthrie, J.T. (2004). Teaching for literacy engagement. *Journal of Literacy Research*, 36(1), 1-28.
- Guthrie, J.T., Wigfield, A., & You, W. (2012). Instructional contexts for engagement and achievement in reading. In S. Christensen, C. Wylie, & A. Reschly (Eds.), *Handbook of research on student engagement*. New York: Springer.
- Heyer, J. (2007). *The impact of animals with struggling readers*. Unpublished master's thesis. Augsburg College: Minneapolis, MN.

Hughes, K. (2002). See spot read. *Public Libraries*, 41(6), 328-330.

Intermountain Therapy Animals. (2007). *Reading Education Assistance Dogs manual* (6th ed).

Salt Lake City, UT: author.

Intermountain Therapy Animals. (2008). Reminders and ideas to help ensure a positive

R.E.A.D.ing experience, *Weekly R.E.A.D.* 1(3).

Jalongo, M.R. (2005a). What are all these dogs doing at school? Using therapy dogs to promote children's reading practice. *Childhood Education*, 81(3), 152-158.

Jalongo, M.R. (2005b May). *How handlers can support struggling readers*. Presented at

R.E.A.D.ing Rendezvous, University of Utah, Salt Lake City, Utah.

Katz, L.G. (2008). *Another look at what children should be learning*. (Report No. EDO-PS-99-5). Retrieved from ERIC database. (ED 453980)

Lynch, J.J. (2000). *A cry unheard: New insights into the medical consequences of loneliness*.

Baltimore, MD: Bancroft Press.

Lynch, J.J. (2005 May). *Reclaiming the human heart in education: Lessons taught by man's best friend*. Presented at the R.E.A.D.ing Rendezvous, University of Utah, Salt Lake City, Utah.

Martin, S. (2001). R.E.A.D. is a pawsitive program for kids of all ages. *Interactions*, 19(3), 7-8.

Melson, G.F. (2001). *Why the wild things are*. Cambridge, MA: Harvard University Press.

Nimer, J., & Lundahl, B. (2007). Animal-assisted therapy: A meta-analysis. *Anthrozoos*, 20(3), 225-238.

Pause and Ponder –

1. The author believes there are benefits of the R.E.A.D. program that go beyond being ‘fun.’ What aspects of the perspectives or discussion spoke to you or convince you there is value in Reading Education Assistance Dogs?
2. Teachers have many students to serve and lack time and human resources to meet all students’ needs. In what ways does the R.E.A.D. program help you rethink the role of volunteers in your classroom?
3. How can you and your colleagues build an engaging environment that supports students’ intrinsic motivation?

Take Action -

- Visit the website and become acquainted with R.E.A.D. www.therapyanimals.org
- Read Mary Renck Jalongo’s (2005) manuscript, “*What are all these dogs doing at school?*” *Using therapy dogs to promote children’s reading practice*. Work through the 12 steps she outlines to prepare for a R.E.A.D. program.
- Request a R.E.A.D. team to visit your school/classroom.
- Start with a small program and build slowly. For example, if you become a registered team, you may only be able to volunteer once a month at the library. Don’t underestimate the impact you can have in this one monthly session.
- Begin the program with younger children and then gradually increase opportunities for older children.
- Remember, the success of R.E.A.D. is the intervention between the child, dog and handler as they interact with the text and each other.

Appendix A - Methodology

Participants

Desert Rose School District is located in the southwest region of the United States. The sample for this study consisted of 197 children (102 male, 95 female) ranging in grades first to fifth from seven elementary schools in the district. Ethnicity breakdown of the students were 41% Caucasian, 48% Hispanic, 3% African-American, 2.5% Asian/Pacific Islander, and 4.5% Native American. District statistics show 59% were economically disadvantaged and 6% were English Language Learners. Seventy-four of the students received supplementary interventions with their individualized education plans. The 123 regular education students did not receive additional intervention. Classroom teachers selected the students based on a number of factors: baseline reading assessment scores, social skills, confidence, emotional/physical limitations, family environment and other considerations.

The 197 selected students participated over the course of one school year beginning with 2006-2007 through 2010-2011. Each child met with a R.E.A.D. team (handler and dog) for 30 minutes per week for approximately 33 weeks during the school year. The total “one on one” reading intervention time for a school year was approximately 16.5 hours, although some students with disabilities worked for 20 minutes per week rather than 30 minutes.

Data collection and analysis

This study employed a mixed methodology. Quantitatively I examined overall reading scores of struggling readers before and after the R.E.A.D. intervention. The district either used the *Developmental Reading Assessment* (Beaver, 2006) or the Northwest Evaluation Association's *Measure of Academic Progress* computerized assessment. These tests were administered by approved district personnel and records were kept by the district. For this study I

obtained the students' pre and post test scores (DRA or MAP) from the district, which were entered into a statistical spreadsheet along with other descriptive information such as grade and if the student had an individualized education plan. I ran paired-samples t-tests.

Qualitatively, at the end of each school year, district leaders created questionnaires to solicit feedback from all participating classroom teachers, parents and students. Additionally, volunteer R.E.A.D. handlers were allowed to share their comments with the district R.E.A.D. coordinator. The questionnaires contained the following information.

- Parents: Your child has been working with a R.E.A.D. program team (dog/owner) for the (years) school year... We ask you to share any comments/observations/changes you have seen in your child since participating in the program.
- Students: You have been working with a R.E.A.D. program team (dog and owner) for all/portion of this school year...If you would like to comment on this experience and how it has impacted you (reading skills, confidence levels, overall observations); we welcome your comments.
- Teachers: 1) Would you rate the experiences of working with a R.E.A.D. team this as positive? If no, why not? 2) Do you intend on requesting a R.E.A.D. team to work with your class again next year? If no, why not? 3) Would you consider the R.E.A.D. program as a viable literacy intervention? 4) What changes in student reading levels were you able to observe and document? 5) What changes did you observe in your students eagerness to start a reading activity as a result of this program? 6) Were you able to see any other positive benefits in your students' behaviors, social skills, communication skills or overall well-being? 7) Any general comments?

I used case study techniques to analyze qualitative data (Merriam, 2009). I individually read each participant's response. While reading, I grouped like responses together such as "grew one grade level" and "My child went up significantly on his reading (DRA) score." After emerging themes formed, I drew conclusions and labeled each theme with a header, such as "reading growth." The themes have been inserted into the manuscript with participants' voices included as support.

Quantitative Results

How much reading growth has been shown by children who read to a dog? Does the amount differ if students are regular education students or if they are students with disabilities?

To answer the first question, paired-sample t-tests were conducted since this research study had a repeated-measures design with an intervention. Each participant had scores on two variables. The first variable represented the pre-test score on each measure and the second variable represented the post-test score on each measure. I was interested to discover if the difference between the two scores was significantly different from zero.

Table 1 displays the raw score mean gains, standard deviations, and p values for the DRA and NWEA total score, both among the group as a whole and disaggregated by regular and special education. Paired sample t-tests showed there was significant growth on total scores for regular and special education students. All learners, regardless of their classification, grew in their reading as measured by their DRA pre-post score, $M = 9.05$, $t(146) = 17.96$, $p < .00$. The students' growth for both regular and special education students on the NWEA was $M = 7.38$, $t(49) = 7.80$, $p < .00$. The results show high standard deviations, indicating there was great

variability among students' scores. Means were run for regular and special education students by grade. Table 2 displays the DRA results and Table 3 displays the NWEA results.

Table 1

Paired-Samples T-Test for the DRA and NWEA Score

Test		Mean Gain	SD	P value
DRA		9.05	6.11	.000
	Regular	10.27	5.46	.000
	Special Ed	8.69	6.59	.000
NWEA		7.80	7.50	.000
	Regular	8.41	7.67	.000
	Special Ed	6.15	6.99	.008

Table 2

Means for the DRA

Grade	Regular Education	Fall	Spring	Special Education	Fall	Spring	Total	Fall	Spring
<i>K</i>	(N=1)			(N=6)			(N=7)		
	Mean	3.00	8.00	Mean	2.33	3.50	Mean	2.43	4.14
	SD			SD	3.14	3.57	SD	2.88	3.63
<i>1</i>	(N=31)			(N=10)			(N=41)		
	Mean	4.42	18.32	Mean	2.20	8.50	Mean	3.88	15.93
	SD	3.98	5.91	SD	1.75	7.46	SD	3.67	7.55
<i>2</i>	(N=18)			(N=16)			(N=34)		
	Mean	20.50	28.67	Mean	3.87	10.50	Mean	12.68	20.12
	SD	7.60	9.51	SD	4.47	9.74	SD	10.48	13.20
<i>3</i>	(N=11)			(N=15)			(N=26)		
	Mean	22.55	32.18	Mean	14.27	22.27	Mean	17.77	26.49
	SD	7.54	8.78	SD	9.00	10.77	SD	9.25	10.98
<i>4</i>	(N=14)			(N=2)			(N=16)		
	Mean	33.86	38.86	Mean	13.00	22.00	Mean	31.25	36.75
	SD	3.80	1.70	SD	4.24	11.31	SD	8.03	6.65
<i>5</i>	(N=11)			(N=12)			(N=23)		
	Mean	69.18	80.45	Mean	20.67	31.75	Mean	43.87	55.04
	SD	4.38	2.73	SD	13.49	18.27	SD	26.72	28.09

Table 3

Means for the NWEA

Gr.	Regular Education	Fall	Spring	Special Education	Fall	Spring	Total	Fall	Spring
4	(N=6)			(N=3)			(N=9)		
	Mean	192.17	198.00	Mean	158.00	161.67	Mean	180.78	185.89
	SD	7.73	8.17	SD	6.08	4.04	SD	18.40	19.39
5	(N=31)			(N=10)			(N=41)		
	Mean	195.35	204.26	Mean	185.40	192.30	Mean	192.93	201.34
	SD	11.11	7.03	SD	14.32	13.42	SD	12.55	9.94

Appendix B - Encouragement

Praise statements typically are comments such as “Good job,” or “Great!” or “Nice work.” In contrast, encouragement has four characteristics. Below each characteristic, several examples of constructive encouragement are provided (ITA, 2007, p. 142).

- Teaches children to evaluate their own efforts
 - Was that fun?
 - Are you glad you tried to...?
 - You seem pleased about...
- Does not judge their work
 - I noticed that you were ...
 - Which of these books did you like best?
- Focuses on the process rather than the outcome
 - How did you use the software to do this?
 - It looks like you are working on reading with expression.
 - I see you are looking for more books by the same author.
- Is a private event that does not embarrass children in public or compare them to others.
 - Thanks for helping organize the books today.
 - I appreciate that you...
 - Aren't you pleased that you were able to...?